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TITLE: Network session management

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An internetwork (such as the Internet) telephony system and method incorporating architecture and methodology which facilitates a high degree of scalability. The scalability provides improvement dealing with usage recording, usage pricing, billing account management, and fraud control. The scalability is achieved primarily by bundling of usage recording, pricing, authorization and billing practices in one logical database object which may be physically distributed. A predefined set of network elements are provided access to the database object to obtain authorization for a call along with limitations on the maximum cost or duration of the call for the particular account involved. The database object records usage statistics relating to the completed call, including pricing, and this data is available for virtually immediate billing. The database object provides to customers on a virtual real time basis the customer's usage statistics, including statistics for a call in progress. The operation proceeds in the following manner. Each Internet telephone service subscriber will have at least one billing and authorization account maintained in a database on the Internet. During set-up of a call, the hop-off gateway will obtain identification and password information from the caller. The gateway then communicates with the database to determine if the call is authorized and to negotiate the overall billing algorithm. When the call if finished, the gateway will report usage data to the database for billing purposes.

Operationally the M1 Object interface will be accessible via commercial browsers and at least a Netscape 3.0 or Internet Explorer 3.0 web browser. On any customer specific request for usage records or account balance, a PC user will have to provide within the query the same account number and password which is used for call establishment. This information will be validated by C3 when fulfilling the request.

The M1.I5 Interface: The Internet Telephony Network Data Extraction internal interface is responsible for providing the M1 Object with real time data